

## ● USP4 Power Dissipation

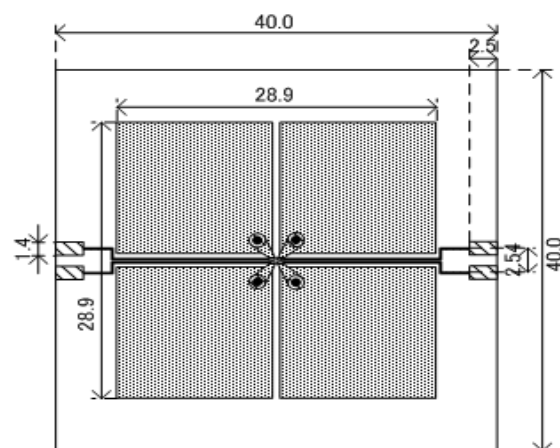
Power dissipation data for the USP4 is shown in this page.

The value of power dissipation varies with the mount board conditions.

Please use this data as one of reference data taken in the described condition.

### 1. Measurement Condition (Reference data)

Condition: Mount on a board  
 Ambient: Natural convection  
 Soldering: Lead (Pb) free  
 Board: Dimensions 40 x 40 mm (1600 mm<sup>2</sup> in one side)  
 Copper (Cu) traces occupy 50% of the front and 50% of the back.  
 The copper area is divided into four block,  
 one block is 12.5% of total.  
 The USP4 package has for terminals.  
 Each terminal connects one copper block in the front  
 and one in the back.  
 Material: Glass Epoxy (FR-4)  
 Thickness: 1.6 mm  
 Through-hole: 4 x 0.8 Diameter

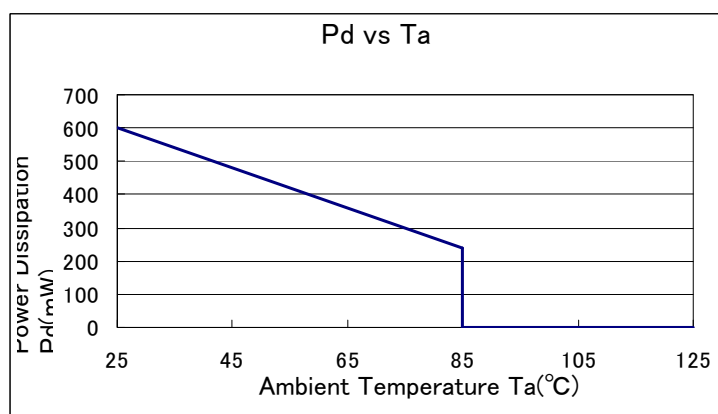


Evaluation Board (Unit: mm)

### 2. Power Dissipation vs. Ambient Temperature (85°C)

Board Mount ( $T_j \text{ max} = 125^\circ\text{C}$ )

Ambient Temperature (°C)	Power Dissipation Pd (mW)	Thermal Resistance $\theta_{ja}$ (°C/W)
25	600	166.67
85	240	



### 3. Power Dissipation vs. Ambient temperature (105°C)

Board Mount ( $T_{j\text{max}}=125^\circ\text{C}$ )

Ambient Temperature (°C)	Power Dissipation Pd (mW)	Thermal Resistance $\theta_{ja}$ (°C/W)
25	600	166.67
105	120	

